Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method performed by at least one device of a communication system, the method comprising:

determining a signal quality value from received packets transmitted at a first data rate;

determining a packet loss indicator value from transmitted packets transmitted at a second data rate; and

selecting a third different data rate in response to the signal quality value determined from the received packets transmitted at the first data rate and the packet loss indicator value determined from the transmitted packets transmitted at the second data rate, wherein the selecting includes selecting the third different data rate from a plurality of available data rates, and each of the plurality of available data rates is different from the first data rate and the second data rate; and

transmitting packets at the third different data rate.

2. (Previously Presented) The method of claim 1, wherein the signal quality value is selected from an RSSI (Received Signal Strength Indicator) value, an SNR (signal to noise ratio) value, an SINR (signal to interference noise ratio) value, and a SQM (signal quality measure) value, the SQM value comprising a mean of the SNRs across all of a plurality of tones.

3. (Original) The method of claim 1, wherein the packet loss indicator value is selected from a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, and a CRC (Cyclic Redundancy Check) indicator

value.

4. (Canceled)

5. (Previously Presented) The method of claim 1, further comprising:

generating a confidence value for each of a plurality of available data rates using the signal quality value and the packet loss indicator value.

6. (Previously Presented) The method of claim 5, further comprising:

generating an adjustment value for the signal quality value from the packet loss indicator value.

7. (Previously Presented) The method of claim 6, wherein the signal quality value comprises an RSSI value.

8. (Previously Presented) The method of claim 7, further comprising:

generating an average received signal strength indicator ($RSSI_{avg}$) value, and

wherein the adjustment value comprises a Δ_{RSSI} value, the Δ_{RSSI} value comprising an adjustment to the $RSSI_{avg}$ value.

9. (Original) The method of claim 8, wherein said generating the confidence value comprises solving the equation:

$Confidence[j] = RSSI_{avg} - RSSI_{TH}[j] - \Delta_{RSSI}$,

where $RSSI_{TH}[j]$ comprises a nominal received signal strength value associated with a data rate [j] in a table.

10. (Previously Presented) The method of claim 9, wherein said selecting the third different data rate comprises selecting a data rate associated with a positive confidence value.

11. (Previously Presented) The method of claim 9, wherein said selecting the third different data rate comprises selecting a data rate associated with a lowest positive confidence value.

12. (Original) The method of claim 6, further comprising:

updating the adjustment value in response to the packet loss indicator value indicating a maximum failure value corresponding to an excessive number of failed packet transmissions.

13. (Original) The method of claim 6, further comprising:

updating the adjustment value in response to the packet loss indicator value indicating a maximum success value corresponding to an excessive number of success packet transmissions.

14. (Previously Presented) The method of claim 1, further comprising:

increasing a transmit power for transmitting packets in response to the selected data rate falling below a first threshold data rate; and

decreasing the transmit power in response to the selected data rate exceeding a second threshold data rate.

15. (Previously Presented) The method of claim 14, wherein the second threshold data rate is greater than the first threshold data rate.

16. (Original) The method of claim 1, further comprising:

decreasing the selected data rate in response to the packet loss indicator value increasing.

17. (Original) The method of claim 16, wherein said decreasing comprises

decreasing the selected data rate in response to data rate values in a table indexed by available data rates and packet loss indicator values.

18. (Previously Presented) The method of claim 1, further comprising:

selecting a fourth data rate value directly from the packet loss indicator value in response to the signal quality value falling below a minimum signal quality value.

19. (Currently amended) An apparatus comprising:

a transceiver including

a transmit section operative to transmit packets at a first data rate and to determine a packet loss indicator value,

a receive section operative to receive packets at a second data rate and to determine a signal quality value from said received packets, and

a rate selector operative to select a third different data rate in response to the signal quality value determined from the packets received at the second data rate and the packet loss indicator value determined from the packets transmitted at the first data rate, wherein the rate selector selects the third different data rate from a plurality of available data rates, and each of the plurality of available data rates is different from the first data rate and the second data rate.

20. (Previously Presented) The apparatus of claim 19, wherein the signal quality value is selected from an RSSI (Received Signal Strength Indicator) value, an SNR (signal to noise ratio) value, an SINR (signal to interference noise ratio) value, and a SQM (signal quality measure) value, the SQM value comprising a mean of the SNRs across all of a plurality of tones.

21. (Original) The apparatus of claim 19, wherein the packet loss indicator value is selected from a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, and a CRC (Cyclic Redundancy Check)

indicator value.

22. (Currently amended) The apparatus of claim 19, further comprising:

a table including [[a]] the plurality of available data rates, each available data rate associated with a nominal signal quality value.

23. (Previously Presented) The apparatus of claim 19, wherein the rate selector is further operative to generate a confidence value for each of a plurality of available data rates using the signal quality value and the packet loss indicator value.

24. (Previously Presented) The apparatus of claim 23, further comprising:

a retry processor operative to generate an adjustment value for the signal quality value from the packet loss indicator value.

25. (Previously Presented) The apparatus of claim 24, wherein the signal quality value comprises an RSSI value.

26. (Previously Presented) The apparatus of claim 25, further comprising a filter to generate an average received signal strength indicator ($RSSI_{avg}$) value, and

wherein the adjustment value comprises a Δ_{RSSI} value, the Δ_{RSSI} value comprising an adjustment to the $RSSI_{avg}$ value.

27. (Original) The apparatus of claim 26, wherein the rate selector is further operative to generate the confidence value by solving the equation:

$Confidence[j] = RSSI_{avg} - RSSI_{TH}[j] - \Delta_{RSSI}$,

where $RSSI_{TH}[j]$ comprises a nominal received signal strength value associated with a data rate [j] in a table.

28. (Previously Presented) The apparatus of claim 27, wherein the rate selector is operative to select a third different data rate associated with a positive confidence value.

29. (Previously Presented) The apparatus of claim 27, wherein the rate selector is operative to select a third different data rate associated with a lowest positive confidence value.

30. (Original) The apparatus of claim 24, further comprising a state machine operative to monitor the packet loss indicator value and determine whether a current data rate causes an excessive number of failed packet transmissions or an excessive number of successful packet transmissions.

31. (Previously Presented) The apparatus of claim 30, wherein the rate selector is further operative to update the adjustment value in response to an output of the state machine indicating that the current data rate causes an excessive number of failed packet transmissions or an excessive number of successful packet transmissions.

32. (Previously Presented) The apparatus of claim 19, further comprising:

a power adaptor operative to increasing a transmit power of the transmit section in response to the selected data rate falling below a first threshold data rate and to decrease the transmit power in response to the selected data rate exceeding a second threshold data rate.

33. (Previously Presented) The apparatus of claim 32, wherein the second threshold data rate is greater than the first threshold data rate.

34. (Original) The apparatus of claim 19, wherein the rate selector is further operative to decrease the selected data rate in response to the packet loss indicator value

increasing.

35. (Original) The apparatus of claim 34, further comprising a table indexed by available data rates and packet loss indicator values, and

wherein the rate selector is operative to decrease the selected data rate in response to data rate values in said table.

36. (Previously Presented) The apparatus of claim 19, wherein the rate selector is further operative to select a fourth data rate value directly from the packet loss indicator value in response to the signal quality value falling below a minimum signal quality value.

37. (Currently amended) An apparatus comprising:

a transceiver including

a transmit section including

means for transmitting packets at a first data rate, and

means for determining a packet loss indicator value from the transmitted packets,

a receive section including

means for receiving packets at a second data rate, and

means for determining a signal quality value from the received packets, and

means for selecting a third different data rate in response to the signal quality value determined from the received packets received at the second data rate and the packet loss indicator value determined from the transmitted packets transmitted at the first data rate, wherein the selecting includes selecting the third different data rate from a plurality of available data rates, and each of the plurality of available data rates is different from the first data rate and the second data rate.

38. (Previously Presented) The apparatus of claim 37, wherein the signal quality value is selected from an RSSI (Received Signal Strength Indicator) value, an SNR (signal to noise ratio) value, an SINR (signal to interference noise ratio) value, and a SQM (signal quality measure) value, the SQM value comprising a mean of the SNRs across all of a plurality of tones.

39. (Original) The apparatus of claim 37, wherein the packet loss indicator value is selected from a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, and a CRC (Cyclic Redundancy Check) indicator value.

40. (Currently amended) The apparatus of claim 37, further comprising:

a table including [[a]] the plurality of available data rates, each available data rate associated with a nominal signal quality value.

41. (Previously Presented) The apparatus of claim 37, further comprising:

means for generating a confidence value for each of a plurality of available data rates using the signal quality value and the packet loss indicator value.

42. (Previously Presented) The apparatus of claim 41, further comprising:

means for generating an adjustment value for the signal quality value from the packet loss indicator value.

43. (Previously Presented) The apparatus of claim 42, wherein the signal quality value comprises an RSSI value.

44. (Previously Presented) The apparatus of claim 43, further comprising:

means for generating an average received signal strength indicator ($RSSI_{avg}$) value, and

wherein the adjustment value comprises a Δ_{RSSI} value, the Δ_{RSSI} value comprising an adjustment to the $RSSI_{avg}$ value.

45. (Original) The apparatus of claim 44, further comprising:

means for generating the confidence value by solving the equation:

$Confidence[j] = RSSI_{avg} - RSSI_{TH}[j] - \Delta_{RSSI}$,

where $RSSI_{TH}[j]$ comprises a nominal received signal strength value associated with a data rate [j] in a table.

46. (Previously Presented) The apparatus of claim 45, further comprising:

means for selecting a third different data rate associated with a positive confidence value.

47. (Previously Presented) The apparatus of claim 45, further comprising:

means for selecting a third different data rate associated with a lowest positive confidence value.

48. (Original) The apparatus of claim 42, further comprising:

means for monitoring the packet loss indicator value; and

means for determining whether a current data rate causes an excessive number of failed packet transmissions or an excessive number of successful packet transmissions.

49. (Previously Presented) The apparatus of claim 48, further comprising:

means for updating the adjustment value in response to the current data rate causing an excessive number of failed packet transmissions or an excessive number of successful packet transmissions.

50. (Previously Presented) The apparatus of claim 37, further comprising:

means for increasing a transmit power of the transmit section in response to the selected data rate falling below a first threshold data rate and to decrease the transmit power in response to the selected data rate exceeding a second threshold data rate.

51. (Previously Presented) The apparatus of claim 50, wherein the second threshold data rate is greater than the first threshold data rate.

52. (Original) The apparatus of claim 37, further comprising:

means for decreasing the selected data rate in response to the packet loss indicator value increasing.

53. (Original) The apparatus of claim 52, further comprising:

a table indexed by available data rates and packet loss indicator values; and

means for decreasing the selected data rate in response to data rate values in said table.

54. (Previously Presented) The apparatus of claim 37, further comprising:

selecting a fourth data rate value directly from the packet loss indicator value in response to the signal quality value falling below a minimum signal quality value.

55. (Currently amended) A computer-readable medium having instructions stored thereon, which, when executed by a processor, causes the processor to perform operations comprising:

determining a signal quality value from received packets transmitted at a first data rate;

determining a packet loss indicator value from transmitted packets transmitted at a second data rate;

selecting a third different data rate in response to the signal quality value

determined from the received packets transmitted at the first data rate and the packet loss indicator value determined from the transmitted packets transmitted at the second data rate, wherein the selecting includes selecting the third different data rate from a plurality of available data rates, and each of the plurality of available data rates is different from the first data rate and the second data rate; and

transmitting packets at the third different data rate.

56. (Previously Presented) The computer-readable medium of claim 55 wherein the signal quality value is selected from an RSSI (Received Signal Strength Indicator) value, an SNR (signal to noise ratio) value, an SINR (signal to interference noise ratio) value, and a SQM (signal quality measure) value, the SQM value comprising a mean of the SNRs across all of a plurality of tones.

57. (Previously Presented) The computer-readable medium of claim 55, wherein the packet loss indicator value is selected from a retry counter value, a bit-error update value, a packet error update value, a symbol error update value, and a CRC (Cyclic Redundancy Check) indicator value.

58. (Canceled)

59. (Previously Presented) The computer-readable medium of claim 55, further comprising:

generating a confidence value for each of a plurality of available data rates using the signal quality value and the packet loss indicator value.

60. (Previously Presented) The computer-readable medium of claim 59, further comprising:

generating an adjustment value for the signal quality value from the packet loss indicator value.

61. (Previously Presented) The computer-readable medium of claim 60, wherein the signal quality value comprises an RSSI value.

62. (Previously Presented) The computer-readable medium of claim 61, further comprising:

generating an average received signal strength indicator ($RSSI_{avg}$) value, and

wherein the adjustment value comprises a Δ_{RSSI} value, the Δ_{RSSI} value comprising an adjustment to the $RSSI_{avg}$ value.

63. (Previously Presented) The computer-readable medium of claim 62, wherein said generating the confidence value comprises solving the equation:

$Confidence[j] = RSSI_{avg} - RSSI_{TH}[j] - \Delta_{RSSI}$,

where $RSSI_{TH}[j]$ comprises a nominal received signal strength value associated with a data rate [j] in a table.

64. (Previously Presented) The computer-readable medium of claim 63 wherein said selecting the third different data rate comprises selecting a data rate associated with a positive confidence value.

65. (Previously Presented) The computer-readable medium of claim 63, wherein said selecting the third different data rate comprises selecting a data rate associated with a lowest positive confidence value.

66. (Previously Presented) The computer-readable medium of claim 60, further comprising:

updating the adjustment value in response to the packet loss indicator value indicating a maximum failure value corresponding to an excessive number of failed packet transmissions.

67. (Previously Presented) The computer-readable medium of claim 60, further comprising:

updating the adjustment value in response to the packet loss indicator value indicating a maximum success value corresponding to an excessive number of success packet transmissions.

68. (Previously Presented) The computer-readable medium of claim 55, further comprising:

increasing a transmit power for transmitting packets in response to the selected data rate falling below a first threshold data rate; and

decreasing the transmit power in response to the selected data rate exceeding a second threshold data rate.

69. (Previously Presented) The computer-readable medium of claim 68, wherein the second threshold data rate is greater than the first threshold data rate.

70. (Previously Presented) The computer-readable medium of claim 55, further comprising:

decreasing the selected data rate in response to the packet loss indicator value increasing.

71. (Previously Presented) The computer-readable medium of claim 70, wherein said decreasing comprises decreasing the selected data rate in response to data rate values in a table indexed by available data rates and packet loss indicator values.

72. (Previously Presented) The computer-readable medium of claim 55, further comprising:

selecting a fourth data rate value directly from the packet loss indicator value in

response to the signal quality value falling below a minimum signal quality value.

73. (Original) The method of claim 1, wherein the transmitted packets and received packets comply with one of the IEEE 802.11 family of specifications.

74. (Original) The apparatus of claim 19, wherein the packets are transmitted and received in compliance with one of the IEEE 802.11 family of specifications.

75. (Original) The apparatus of claim 37, wherein the packets are transmitted and received in compliance with one of the IEEE 802.11 family of specifications.

76. (Previously Presented) The computer-readable medium of claim 55, wherein the transmitted packets and received packets comply with one of the IEEE 802.11 family of specifications.